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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,328	02/12/2004	Saad N. Neme	5014	4918

23623 7590 04/12/2006

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EXAMINER

MARCHESCHI, MICHAEL A

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,328

Applicant(s)

NEMEH ET AL.

Examiner

Michael A. Marcheschi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 20-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 20-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-13 and 20-28 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for “pulverizing before **heat treatment** (i.e. calcining), does not reasonably provide enablement for pulverizing before “**any type of heating step**”. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

The claims recite “pulverizing...**before heating**”. This encompasses pulverizing before any type of heating. The broad interpretation of “heating” encompasses drying. Page 7, line 26- page 8, line 10 of the specification defines that after delamination but prior to pulverization, the clay is dried (i.e. encompasses heating), thus from the specification it is apparent that a heating step takes place before the pulverization step. As defined above, since drying broadly reads on heating, the added limitation “before heating” is not adequate to define that the pulverization steps takes place prior to the heating defined in the last two lines of the independent claims. Although the specification defines the heating step at a specific temperature (calcining), the added limitation “before heating” does not require any specific temperature thus another reason why it can be considered to read on drying. In view of this, such a disclosure in the specification does not support the breadth of the instant claims. The examiner suggests that the added limitation “before heating” be defined in terms of the specific heating steps defined in the last two lines of the claims, **thus excluding drying from this step**.

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Claims 1-13 and 20-28 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for Chinese kaolin from a **specific province (i.e. Shanxi kaolin)**, does not reasonably provide enablement for Chinese kaolin materials (**from all provinces of China**). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims. The specification only defines the process in relation to the processing of Chinese kaolin from a specific province (see above) and not any and all other Chinese kaolin clays from different mines, thus the claims are broader in scope than the disclosure. Although the specification might set forth a definition on page 4, lines 4-8, this definition uses relative terms which makes the definition, itself, indefinite.

Claims 8-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8-9 are indefinite as to the limitation “further comprising **drying** before pulverization” because claim 1, as defined in the scope of enablement rejection above, defines that the clay is pulverized before it is heated (i.e. this broadly encompasses drying). In view of this, the scope of the above claims is indefinite when viewed in context with the added limitation “before heated”. Since the added limitation “before heating” reads on a drying step, claim 1 as defined, can broadly be interpreted to read on pulverization occurring after drying, thus this is contradictory to claims 8-9.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

PREVIOUS ART REJECTIONS AND RESPONSE TO ARGUMENTS

Claims 1-9, 11-13 and 23-28 are rejected under 35 U.S.C. 103(a) as obvious over *Mixon, Jr.* for the same reasons set forth in the previous office action which are incorporated herein by reference.

Claim 10 is rejected under 35 U.S.C. 103(a) as obvious over *Mixon, Jr.* in view of *Maxwell et al.* for the same reasons set forth in the previous office action which are incorporated herein by reference.

Applicant's arguments filed 1/20/06 have been fully considered but they are not persuasive.

With respect to the enablement rejection, applicants argue that page 4, line 2 defines support for this. The examiner acknowledges this, however, the specification is clearly directed to one specific Chinese kaolin, that being found in the Shanxi province of China and clearly does not enable any and all kaolin for any and all provinces in China. This is apparent in view of the labeling of the clay as Shanxi kaolin.

With respect to the rejection based on *Mixon*, applicants argue that this reference does not teach (1) the use of Chinese kaolin and (2) the exact sequence of pulverizing and calcining required by the instant claims.

With respect to (1) above, the examiner defined that one skilled in the art would have appreciated that **any** type of kaolin can be processed in this manner. In addition, irrespective of what the material is called, the method of forming it is the same, thus no distinction is seen to exist. Finally, Mixon, Jr. teaches processing of kaolin, in general, (see column 1, lines 6-20-no limitation placed on the kaolin type) and therefore this reads on and makes obvious the processing of any type kaolin clay because the reference does not limit the clay to a specific type. Although column 5, line 10 defines Georgia kaolin, the reference uses “such as” and “such as” is not indicative of this being the only clay that can be processed. It is merely defining an example. Applicants have not addressed this reasoning defined in the last office action (that one skilled in the art would have appreciated that **any** type of kaolin can be processed in this manner (according to Mixon)). As a further point, kaolin occurs in nature in numerous areas and the processing of one specific type of kaolin with any known processing of kaolin is clearly within the scope of the skilled artisan and thus obvious. Applicants also argue that this reference is directed to processing Georgia kaolin. Although column 5, lines 10 defines Georgia kaolin, the reference uses “such as” and “such as” is not indicative of this being the only clay that can be processed (see above). In addition, claim 1 does not define any type of kaolin, thus this claim broadly reads on processing any type of kaolin and is not limited to Georgia as argued by applicants.

With respect to (2) above, the examiner stated that although the multiple pulverization steps is after the calcining step of the reference and the claimed invention is done before the calcining step, no distinction is seen to exist because **reversing** the order of steps in a process does not impart patentability when no unexpected result is obtained. Ex parte Rubin (POBA

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1959) 128 U.S.P.Q. 440, Cohn v. Comr. Pats. (DCDC 1966) 251 F Supp 378, 148 U.S.P.Q. 486.

In view of this, the multiple pulverization prior to calcining is obvious and well within the level of ordinary skill in the art. In addition, pulverization is used to produce the desired sized material and pulverization prior to calcining is known as shown by *Mixon, Jr.* The use of multiple pulverization steps is obvious to the skilled artisan in order to ensure that the desired particle size is obtained. More than one pulverization step is better than only one pulverization since the second and subsequent pulverization steps will optimize the uniformity of the size distribution. In view of this, one skilled in the art would have appreciated and therefore found the use of multiple pulverization steps obvious. Applicants have not fully addressed the examiners position. Applicants argue that the multiples pulverization steps is for a specific function (expose or release carbon) however, this is not claimed. Even if it was, as defined above, applicants have not addressed the obviousness of the rejection (examiners position), as previously defined.

With respect to the rejection based on *Mixon* and *Maxwell*. Applicants have not addressed the examiner reasons for combining. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With respect to the rejection based on *Hen* (claims 20-22), this rejection is withdrawn and replaced with a new rejection necessitated by applicants amendments.

NEW ART REJECTION BASED ON APPLICANTS AMENDMENTS. (specifically lines 6-8 to claim 1).

Claims 20-22 are rejected under 35 U.S.C. 103(a) as obvious Fanselow.

Fanselow teaches in the claims, a kaolin clay pigment (no limitation is imposed on the type) which has an ASTM oil absorption of 60+ percent and a TAPPI brightness of 92+ percent.

The reference teaches a kaolin clay material having the claimed characteristics. Although this reference does not specifically define "Chinese kaolin", this aspect is obvious because claim 1 of the reference does not define any type of kaolin, thus this claim broadly reads on any type of kaolin material and is not limited to Georgia. Although column 4, lines 23-25 defines Georgia kaolin, the reference uses the limitation "by way of an example" and this limitation is not indicative of this being the only clay in the scope of the reference. It is merely defining an example. As a further point, kaolin occurs in nature in numerous areas and the processing of one specific type of kaolin to have the desired properties of conventional kaolin clays is clearly within the scope of the skilled artisan in order to obtain a specific kaolin having desirable properties as paper fillers. Although the processing used to make the clay is not the same, no distinction is seen to exist because applicants use process limitations to define the product and "product-by-process" claims do not patentably distinguish the product even though made by a different process. *In re Thorpe* 227 USPQ 964.

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356. To establish unexpected results over a claimed range, applicants

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should compare a sufficient number of tests both inside and outside (i.e. as well as the upper and lower limits) the claimed range to show the criticality of the claimed range. *In re Hill 284 F.2d 955, 128 USPQ 197 (CCPA 1960).*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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MM



Michael A Marcheschi
Primary Examiner
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